

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/905,274	07/13/2001	Clifford Theodore Papsdorf	8609	2737	
27752	7590 07/07/2006	07/07/2006		EXAMINER	
THE PROCTER & GAMBLE COMPANY INTELLECTUAL PROPERTY DIVISION WINTON HILL BUSINESS CENTER - BOX 161 6110 CENTER HILL AVENUE			TAWFIK, SAMEH		
			ART UNIT	PAPER NUMBER	
			3721		
CINCINNA	CINCINNATI, OH 45224			DATE MAILED: 07/07/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)			
Office Action Summary	09/905,274	PAPSDORF, CLIFFORD THEODORE			
Office Action Summary	Examiner	Art Unit			
	Sameh H. Tawfik	3721			
The MAILING DATE of this communication appeariod for Reply	ears on the cover sheet with the c	orrespondence address			
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period we Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	6(a). In no event, however, may a reply be time within the statutory minimum of thirty (30) days ill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).			
Status	4m., 0000				
<u> </u>	esponsive to communication(s) filed on <u>03 May 2006</u> .				
, <u> </u>	s action is non-final.				
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. Disposition of Claims					
4)⊠ Claim(s) <u>1-27</u> is/are pending in the application.					
, <u> </u>		•			
4a) Of the above claim(s) <u>20</u> is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.					
6)⊠ Claim(s) <u>1-19 and 21-27</u> is/are rejected.					
7) Claim(s) is/are objected to.					
8) Claim(s) are subject to restriction and/or Application Papers	election requirement.				
9)☐ The specification is objected to by the Examiner					
10) The drawing(s) filed on is/are: a) □ accept		niner			
,					
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). 11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner.					
If approved, corrected drawings are required in reply to this Office action.					
12) The oath or declaration is objected to by the Examiner.					
Priority under 35 U.S.C. §§ 119 and 120					
13) Acknowledgment is made of a claim for foreign	priority under 35 U.S.C. & 119(a))-(d) or (f).			
a) All b) Some * c) None of:	priority ariabi ob ololol 3 110(a	, (4) 0. (.).			
1. Certified copies of the priority documents	have been received				
· · · · · · · · · · · · · · · · · · ·		nn No			
 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage 					
application from the International Bur * See the attached detailed Office action for a list of	eau (PCT Rule 17.2(a)).				
14) Acknowledgment is made of a claim for domestic	priority under 35 U.S.C. § 119(e	e) (to a provisional application).			
a) The translation of the foreign language provided to the foreign	· •				
Attachment(s)					
Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of Informal F	(PTO-413) Paper No(s) Patent Application (PTO-152)			

Art Unit: 3721

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 2-6, 13-18, 21-23, and 25-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tipper (U.S. Patent No. 3,348,458) in view of MoConnell (U.S. Patent No. 775.495).

Tipper discloses method and apparatus for forming pleatable web having a mutually orthogonal machine direction, a cross machine direction and a Z-direction, see for example (Fig. 4) the apparatus comprising a first series of elongate spaced protuberances converging in the cross machine direction (Figs. 2 and 4; via 36); a second series of elongate spaced protuberances converging in the machine direction (Figs. 2 and 4; via 37), wherein the first series of protuberances and the second series of protuberances interleave in the Z-direction (Figs. 2-4, 19, and 22); and the first series and the second series of interleaved protuberances being capable of folding a pleatable web into a generally pleated pattern of machine direction pleats upon contact of the web relative to the first and second series of protuberances (Figs. 16-19 and 22).

Tipper does not disclose that a drive element disposed to form a friction nip with the first series of elongate spaced protuberances. However, MoConnell discloses a similar web pleating apparatus using a drive element disposed to form a friction nip with the first series of elongate

Art Unit: 3721

spaced protuberances, see for example (Figs. 1-3; via multi rollers 5, and driving rollers 8; column 3, lines 24-26).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified Tipper's pleating apparatus with the use of driving element as being disposed to form a friction nip with the first series of elongate spaced protuberances, as suggested by MoConnell (for example via driving element via upper roller 8 and first series of elongate protuberances via lower roller 8), in order to feed and draw the web through the machine without danger of breaking or tearing the web (column 1, lines 45-49).

Regarding claim 2: Tipper discloses that the apparatus has a machine direction inlet to the first and second series of elongate spaced protuberances and the apparatus has a machine direction outlet from the first and second series of elongate spaced protuberances wherein the web maintains contact with the first series and the second series of interleaved protuberances from the inlet to the outlet, see for example (Figs. 1 and 3).

Regarding claim 3: Tipper discloses that wherein the converging elongate spaced protuberances are blades (Figs. 4; via 36 and 37 and Figs. 16-19; via 109 and 108).

Regarding claims 4 and 16: Tipper discloses that a converging tunnel (Fig. 1, via pleated casing 48) disposed downstream in the machine direction of the first and second series of interleaved protuberances (36 and 37) to receive the web and wherein the pleated web is constrained by the converging tunnel to maintain the pleated pattern when the web is within the converging tunnel (Fig. 1).

Art Unit: 3721

Regarding claims 5 and 15: Tipper discloses that the converging tunnel comprises an arcuate cavity for receiving the web (Fig. 1; via 48); note that it is inherent pleated casing 48 discloses cavity for receiving the web.

Regarding claims 6, 18, and 22: Tipper discloses that a drive roll for pushing the pleatable web into the interleaved protuberances, see for example (Fig. 1); note that it is inherent the machine has some drive means to convey the web.

Regarding claim 13: Tipper discloses that the first series of protuberances and the second series of protuberances are spaced apart in the cross machine direction (Fig. 4).

Regarding claim 18: Tipper discloses that pushing the pleatable web relative to the interleaved first and second series of converging elongate spaced protuberances (Figs. 16-19; via by pushing the protuberances toward each other).

Regarding claim 23: Tipper discloses that the pleatable web has a first side and a second side opposed thereto, the first series of spaced protuberances contacting the first side and the second series of spaced protuberances contacting the second side when the pleatable web contacts the web pleating apparatus (Figs. 16-19).

Regarding claim 26: Tipper discloses that wherein the arcuate cavity has a radius being decreasable in the machine direction, see for example (Fig. 1).

Regarding claim 27: Tipper discloses that wherein the arcutate cavity has a substantially uniform radius, see for example (Figs. 1 and 16-19).

Claims 7-9, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tipper (U.S. Patent No. 3,348,458) in view of MoConnell (U.S. Patent No. 775.495).

Art Unit: 3721

Tipper nor MoConnell disclose that the second coefficient of friction of the drive roller is greater than the first coefficient of friction of the protubernaces. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified Tipper in view of MoConnell's web pleating apparatus by having the second coefficient of friction of the drive roll is greater than the first coefficient of friction of the first and second spaced protuberances, as a matter of engineering design choice, since the examiner takes an official notice that it has to be differences between frictions in order to keep transferring and driving the web through the apparatus is old, well known, and available in the art.

Regarding claims 8 and 19: Tipper nor MoConnell disclose a heater for heating the pleated web. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified Tipper in view of MoConnel's web pleating apparatus by having a heater for heating the pleated web, as a matter of engineering design choice, since the examiner takes an official notice that using heater for heating the pleated web is old, well known, and available in the art.

Regarding claim 9: Tipper nor MoConnell disclose a cooler for cooling the web downstream from the heater. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified Tipper in view of MoConnell's web pleating apparatus by having a cooler for cooling the web downstream from the heater, as a matter of engineering design choice, since the examiner takes an official notice that using cooler for cooling the web downstream from the heater is old, well known, and available in the art.

Art Unit: 3721

Claims 10-12, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tipper (U.S. Patent No. 3,348,458) in view of in view of MoConnell (U.S. Patent No. 775.495) and further in view of Benedict (2,314,757).

Tipper nor MoConnell disclose that a scoring device prior to the pleatable station wherein the scoring device comprises first and second axially rotatable rolls and maintaining a fixed gap therebetween. However, Benedict discloses a similar web pleating apparatus comprising a scoring device comprises a first and second axially rotatable rolls (Fig. 1, via rollers 15 and 16) and maintaining a fixed gap there-between (Fig. 1, note it has to be gap between rollers in order to feed the web there-between).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified Tipper in view of MoConnell's web pleating apparatus by having a scoring device comprising a first and second axially rotatable rolls and maintaining a fixed gap there-between, as suggested by Benedict, in order to reduce friction and danger of breakage of the web (column 1, lines 11-13).

Response to Arguments

Applicant's arguments with respect to claims 1-19 and 21-27 have been considered but are most in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Unit: 3721

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sameh H. Tawfik whose telephone number is 571-272-4470. The examiner can normally be reached on Tuesday - Friday from 8:00 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rinaldi Rada can be reached on 571-272-4467. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3721

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Sameh H. Tawfik Primary Examiner Art Unit 3721

ST.